



# 2008 PAG Regional Bicycle Count



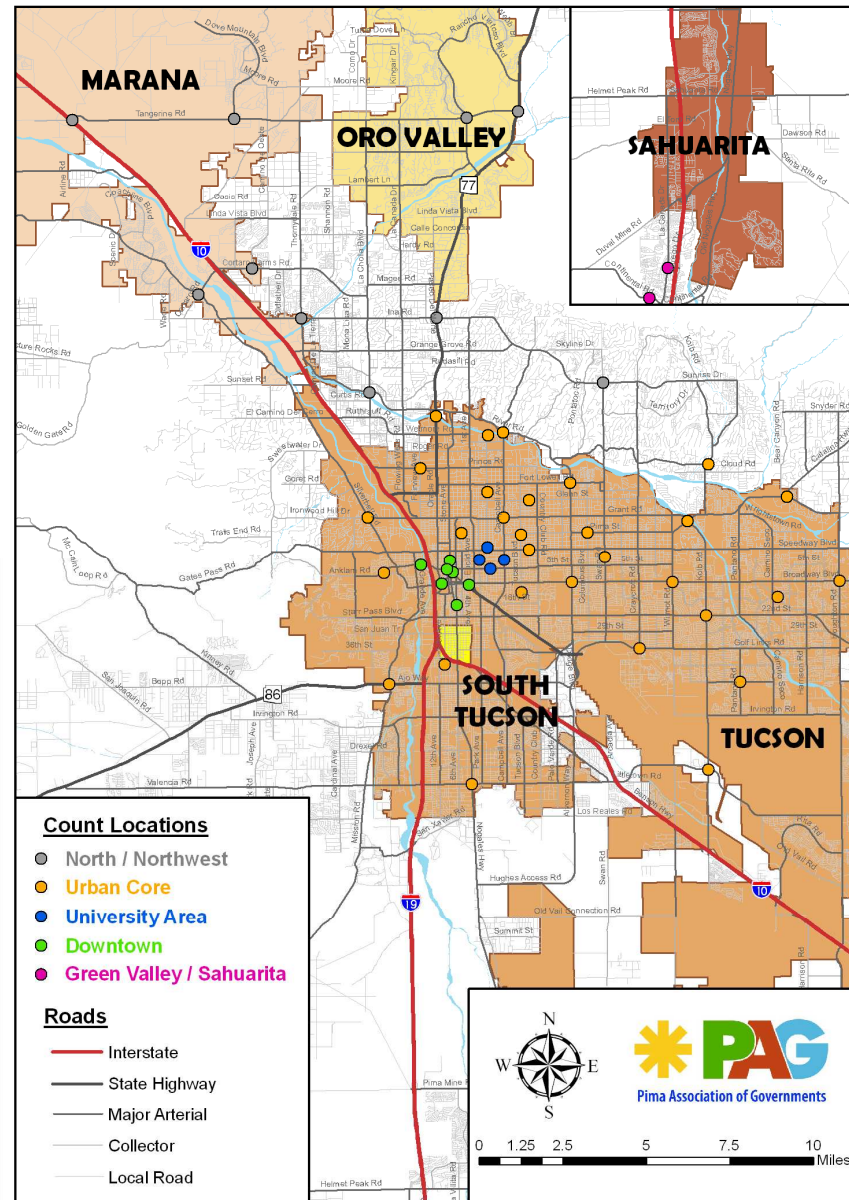
# Reasons to Count

- ***Conditions and trend analysis*** – document the number of people currently bicycling, how this number is changing over time, and characteristics of cyclists
- ***Network planning*** – help prioritize improvements and find locations needing attention
- ***Crash analysis*** – develop exposure measures
- ***Travel Demand Forecasting*** – calibrate models
- ***Travel Demand Management*** – measure Travel Demand Management and Safety/Outreach program effectiveness by producing tangible data that can be compared over time

# Methodology

- Over 50 count locations throughout region
- 15-minute interval counts, between hours of 7am to 9am and 4pm to 6pm (peak hours)
- October (prime weather, UofA, some snowbirds, highest crash numbers)
- Attributes Collected:
  - Approach direction
  - Gender
  - Age range
  - Helmet usage
  - Sidewalk riding
  - Wrong-way riding
- Data collected via observation—no surveys

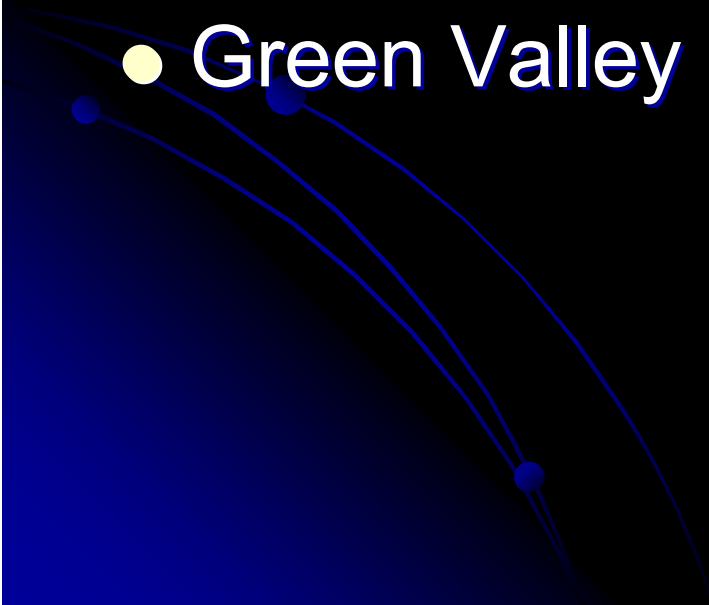
# Bike Count Locations, October 2008



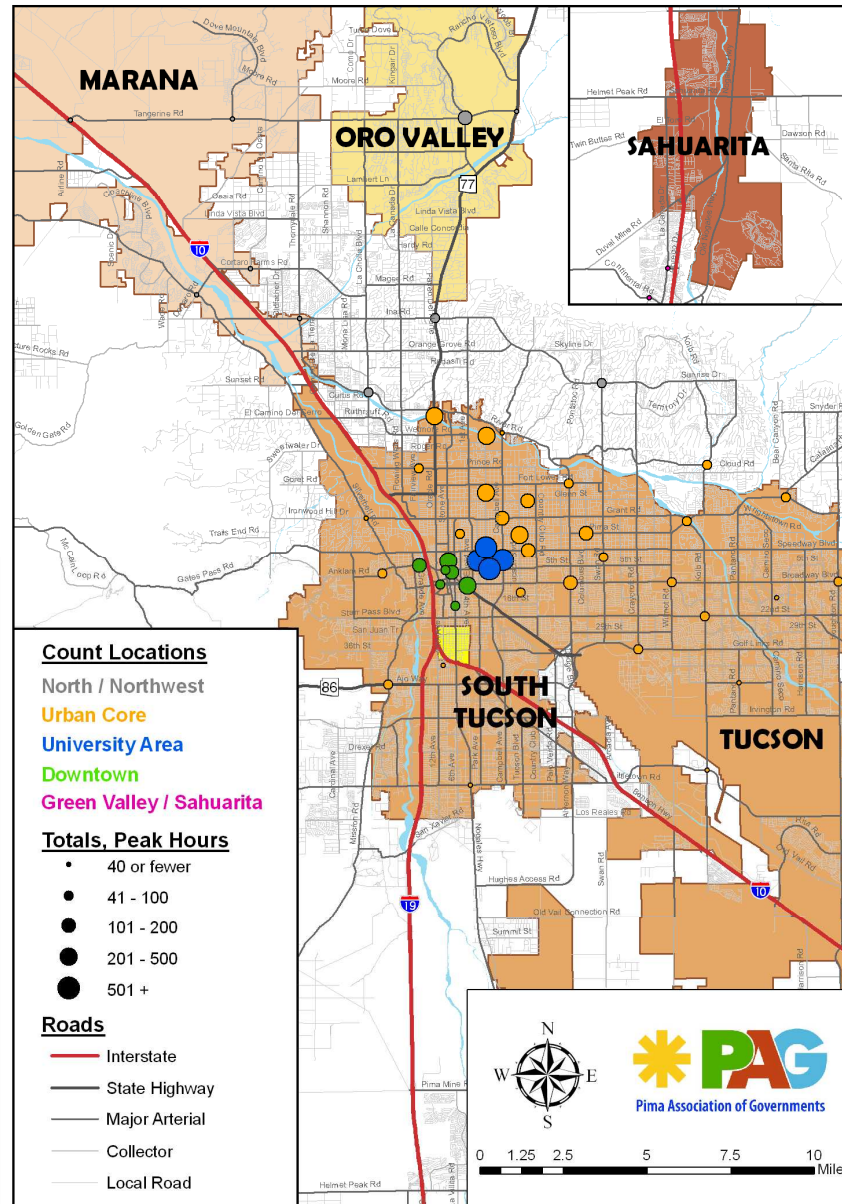
# Overall Findings

- 8,316 bicyclists counted
- 52% PM, 48% AM
- 75% male
- Over 90% between the ages of 18 and 65
- 46% wore helmets
- 5% wrong-way riding
- 9% were riding on the sidewalk

# Counts by Area

- UofA: 3,613 4 count locations
  - Downtown: 1,176 7 count locations
  - Urban Core: 3,025 30 count locations
  - North & NW: 454 10 count locations
  - Green Valley & Sahuarita: 48 2 count locations
- 

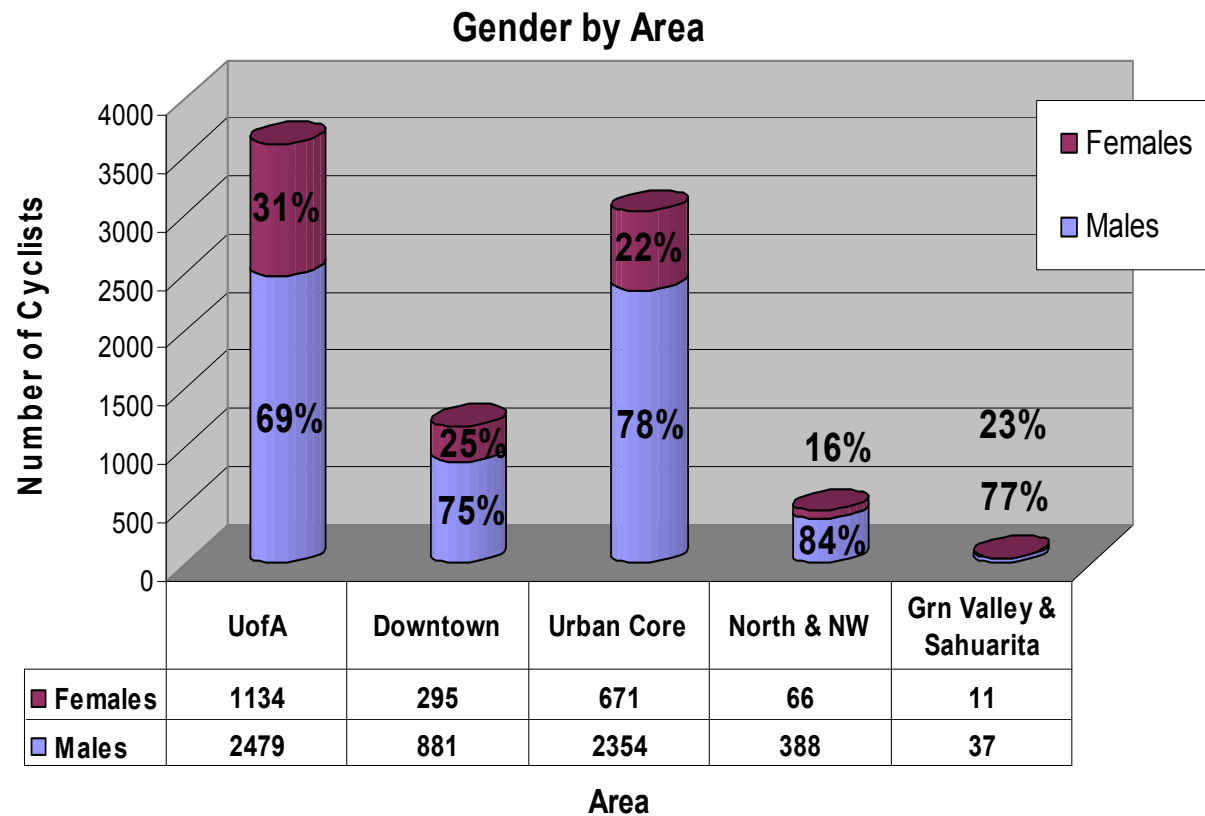
# Bike Counts by Location, October 2008



LOCATION		VOLUME				GENDER		AGE			OTHER ATTRIBUTES			PERCENTAGES											
Regional Location	Location	AM Total	PM Total	Total	Volume Rank	Female	Male	<18	18-65	>65	Wearing Helmet	Wrong-Way Riding	Sidewalk Riding	AM %	PM %	Female %	Male %	<18 %	18-65 %	>65 %	Helmet %	Wrong-Way %	Sidewalk %		
UA	3rd & Campbell	559	670	1229	1	358	871	89	1088	52	389	14	27	45.5%	54.5%	29.1%	70.9%	7.2%	88.5%	4.2%	31.7%	1.1%	2.2%		
UA	Park & University	475	583	1058	2	345	713	5	1024	29	242	10	19	44.9%	55.1%	32.6%	67.4%	0.5%	96.8%	2.7%	22.9%	0.9%	1.8%		
UA	Mountain & Helen	400	425	825	3	260	565	2	804	19	282	33	25	48.5%	51.5%	31.5%	68.5%	0.2%	97.5%	2.3%	34.2%	4.0%	3.0%		
UA	6th St & Highland Ave	197	304	501	4	171	330	9	483	9	112	55	136	39.3%	60.7%	34.1%	65.9%	1.8%	96.4%	1.8%	22.4%	11.0%	27.1%		
UofA Total		1631	1982	3613		1134	2479	105	3399	109	1025	112	207	45.1%	54.9%	31.4%	68.6%	2.9%	94.1%	3.0%	28.4%	3.1%	5.7%		
Downtown	Stone & University	177	162	339	6	109	230	5	331	3	161	7	12	52.2%	47.8%	32.2%	67.8%	1.5%	97.6%	0.9%	47.5%	2.1%	3.5%		
Downtown	Snake Bridge (Bdwy/Aviation)	134	135	269	8	57	212	4	263	2	148	18	32	49.8%	50.2%	21.2%	78.8%	1.5%	97.8%	0.7%	55.0%	6.7%	11.9%		
Downtown	St.Mary & Santa Cruz River	90	108	198	11	49	149	19	173	6	125	11	28	45.5%	54.5%	24.7%	75.3%	9.6%	87.4%	3.0%	63.1%	5.6%	14.1%		
Downtown	7th St & 7th Ave	68	106	174	12	45	129	0	169	5	79	12	3	39.1%	60.9%	25.9%	74.1%	0.0%	97.1%	2.9%	45.4%	6.9%	1.7%		
Downtown	Congress & Granada	32	46	78	27	13	65	0	76	2	26	4	22	41.0%	59.0%	16.7%	83.3%	0.0%	97.4%	2.6%	33.3%	5.1%	28.2%		
Downtown	18th ST./6TH Ave.	28	32	60	32	11	49	3	57	0	15	5	13	46.7%	53.3%	18.3%	81.7%	5.0%	95.0%	0.0%	25.0%	8.3%	21.7%		
Downtown	9th Ave./6th St.	25	33	58	33	11	47	3	41	14	24	5	0	43.1%	56.9%	19.0%	81.0%	5.2%	70.7%	24.1%	41.4%	8.6%	0.0%		
Downtown Total		554	622	1176		295	881	34	1110	32	578	62	110	47.1%	52.9%	25.1%	74.9%	2.9%	94.4%	2.7%	49.1%	5.3%	9.4%		
Urban Core	Mountain/Blacklidge	195	177	372	5	115	257	22	350	0	224	7	7	52.4%	47.6%	30.9%	69.1%	5.9%	94.1%	0.0%	60.2%	1.9%	1.9%		
Urban Core	Mountain & River Park	162	177	339	7	82	257	3	333	3	260	0	0	47.8%	52.2%	24.2%	75.8%	0.9%	98.2%	0.9%	76.7%	0.0%	0.0%		
Urban Core	Oracle & Rillito Pathway	110	138	248	9	58	190	0	236	12	174	7	18	44.4%	55.6%	23.4%	76.6%	0.0%	95.2%	4.8%	70.2%	2.8%	7.3%		
Urban Core	Tucson/Elm	129	94	223	10	74	149	2	219	2	133	4	9	57.8%	42.2%	33.2%	66.8%	0.9%	98.2%	0.9%	59.6%	1.8%	4.0%		
Urban Core	Glenn/Treat	84	78	162	13	42	120	10	149	3	102	1	0	51.9%	48.1%	25.9%	74.1%	6.2%	92.0%	1.9%	63.0%	0.6%	0.0%		
Urban Core	Speedway/Treat	74	73	147	14	46	101	21	119	7	81	6	17	50.3%	49.7%	31.3%	68.7%	14.3%	81.0%	4.8%	55.1%	4.1%	11.6%		
Urban Core	Pima/Columbus	63	75	138	15	23	115	0	138	0	74	10	4	45.7%	54.3%	16.7%	83.3%	0.0%	100.0%	0.0%	53.6%	7.2%	2.9%		
Urban Core	ALV/BWAY	48	68	116	16	21	95	0	116	0	57	16	28	41.4%	58.6%	18.1%	81.9%	0.0%	100.0%	0.0%	49.1%	13.8%	24.1%		
Urban Core	Campbell/Grant	29	78	107	17	31	76	2	103	2	41	22	42	27.1%	72.9%	29.0%	71.0%	1.9%	96.3%	1.9%	38.3%	20.6%	39.3%		
Urban Core	3rd & Swan	44	50	94	20	20	74	7	86	1	52	5	11	46.8%	53.2%	21.3%	78.7%	7.4%	91.5%	1.1%	55.3%	5.3%	11.7%		
Urban Core	Price & Fairview	45	46	91	22	5	86	8	80	3	13	13	26	49.5%	50.5%	5.5%	94.5%	8.8%	87.9%	3.3%	14.3%	14.3%	28.6%		
Urban Core	St.Mary's/Anklam	42	48	90	23	19	71	6	84	0	73	1	2	46.7%	53.3%	21.1%	78.9%	6.7%	93.3%	0.0%	81.1%	1.1%	2.2%		
Urban Core	Kolb & 22nd	37	50	87	24	7	80	48	38	1	28	29	57	42.5%	57.5%	8.0%	92.0%	55.2%	43.7%	1.1%	32.2%	33.3%	65.5%		
Urban Core	Broadway/Wilmont	39	48	87	25	6	81	8	79	0	51	16	26	44.8%	55.2%	6.9%	93.1%	9.2%	90.8%	0.0%	58.6%	18.4%	29.9%		
Urban Core	Alvemon/ Ft. Lowell	32	39	71	28	13	58	5	65	1	28	18	20	45.1%	54.9%	18.3%	81.7%	7.0%	91.5%	1.4%	39.4%	25.4%	28.2%		
Urban Core	Sabino Canyon & River	47	17	64	29	13	51	3	58	3	54	2	1	73.4%	26.6%	20.3%	79.7%	4.7%	90.6%	4.7%	84.4%	3.1%	1.6%		
Urban Core	Tanque Verde/Kolb	31	32	63	30	6	57	2	59	2	46	6	15	49.2%	50.8%	9.5%	90.5%	3.2%	93.7%	3.2%	73.0%	9.5%	23.8%		
Urban Core	Mission /Ajo	45	16	61	31	6	55	0	61	0	55	3	3	73.8%	26.2%	9.8%	90.2%	0.0%	100.0%	0.0%	90.2%	4.9%	4.9%		
Urban Core	Craycroft & Golf Links	22	34	56	34	4	52	1	52	3	33	9	12	39.3%	60.7%	7.1%	92.9%	1.8%	92.9%	5.4%	58.9%	16.1%	21.4%		
Urban Core	Broadway & Houghton	20	27	47	35	11	36	5	41	1	32	2	5	42.6%	57.4%	23.4%	76.6%	10.6%	87.2%	2.1%	68.1%	4.3%	10.6%		
Urban Core	Tucson /Arroyo Chico	19	27	46	36	16	30	2	42	2	24	4	5	41.3%	58.7%	34.8%	65.2%	4.3%	91.3%	4.3%	52.2%	8.7%	10.9%		
Urban Core	Catalina Hwy & Tanque Verde	32	14	46	37	6	40	0	46	0	46	0	0	69.6%	30.4%	13.0%	87.0%	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%		
Urban Core	4th Ave and Lester	16	28	44	38	16	28	3	41	0	11	1	0	36.4%	63.6%	36.4%	63.6%	6.8%	93.2%	0.0%	25.0%	2.3%	0.0%		
Urban Core	Old Spanish / Kenyon	27	12	39	39	9	30	8	30	1	30	3	5	69.2%	30.8%	23.1%	76.9%	20.5%	76.9%	2.6%	76.9%	7.7%	12.8%		
Urban Core	River & Campbell	18	21	39	40	9	30	0	39	0	32	0	5	46.2%	53.8%	23.1%	76.9%	0.0%	100.0%	0.0%	82.1%	0.0%	12.8%		
Urban Core	Silverbell & Ironwood Hill	24	14	38	41	2	36	5	33	0	23	3	1	63.2%	36.8%	5.3%	94.7%	13.2%	86.8%	0.0%	60.5%	7.9%	2.6%		
Urban Core	Escalante&Pantano	18	16	34	42	3	31	19	14	1	9	12	19	52.9%	47.1%	8.8%	91.2%	55.9%	41.2%	2.9%	26.5%	35.3%	55.9%		
Urban Core	10th Ave & 43rd	14	19	33	43	7	26	4	29	0	10	6	9	42.4%	57.6%	21.2%	78.8%	12.1%	87.9%	0.0%	30.3%	18.2%	27.3%		
Urban Core	Kolb/Valencia	16	10	26	46	1	25	0	25	1	22	1	3	61.5%	38.5%	3.8%	96.2%	0.0%	96.2%	3.8%	84.6%	3.8%	11.5%		
Urban Core	Nogales / Valencia	9	8	17	49	0	17	1	16	0	11	3	2	52.9%	47.1%	0.0%	100.0%	5.9%	94.1%	0.0%	64.7%	17.6%	11.8%		
Urban Core Total		1491	1534	3025		671	2354	195	2781	49	1829	210	352	49.3%	50.7%	22.2%	77.8%	6.4%	91.9%	1.6%	60.5%	6.9%	11.6%		
North & NW	Tangerine & 1st Ave	67	36	103	18	18	85	4	99	0	86	1	2	65.0%	35.0%	17.5%	82.5%	3.9%	96.1%	0.0%	83.5%	1.0%	1.9%		
North & NW	Ina / Oracle	67	28	95	19	10	85	0	94	1	87	1	2	70.5%	29.5%	10.5%	89.5%	0.0%	98.9%	1.1%	91.6%	1.1%	2.1%		
North & NW	Swan & Sunrise	58	35	93	21	16	77	8	78	7	80	6	9	62.4%	37.6%	17.2%	82.8%	8.6%	83.9%	7.5%	86.0%	6.5%	9.7%		
North & NW	River/ La Cholla	38	45	83	26	13	70	4	79	0	36	10	26	45.8%	54.2%	15.7%	84.3%	4.8%	95.2%	0.0%	43.4%	12.0%	31.3%		
North & NW	Ina & Thornydale	10	17	27	45	5	22	4	23	0	11	9	14	37.0%	63.0%	18.5%	81.5%	14.8%	85.2%	0.0%	40.7%	33.3%	51.9%		
North & NW	Silverbell/Cortaro	6	12	18	48	1	17	2	14	2	8	2	3	33.3%	66.7%	5.6%	94.4%	11.1%	77.8%	11.1%	44.4%	11.1%	16.7%		
North & NW	Oracle & Tangerine	12	3	15	50	2	13	0	15	0	15	0	0	80.0%	20.0%	13.3%	86.7%	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%		

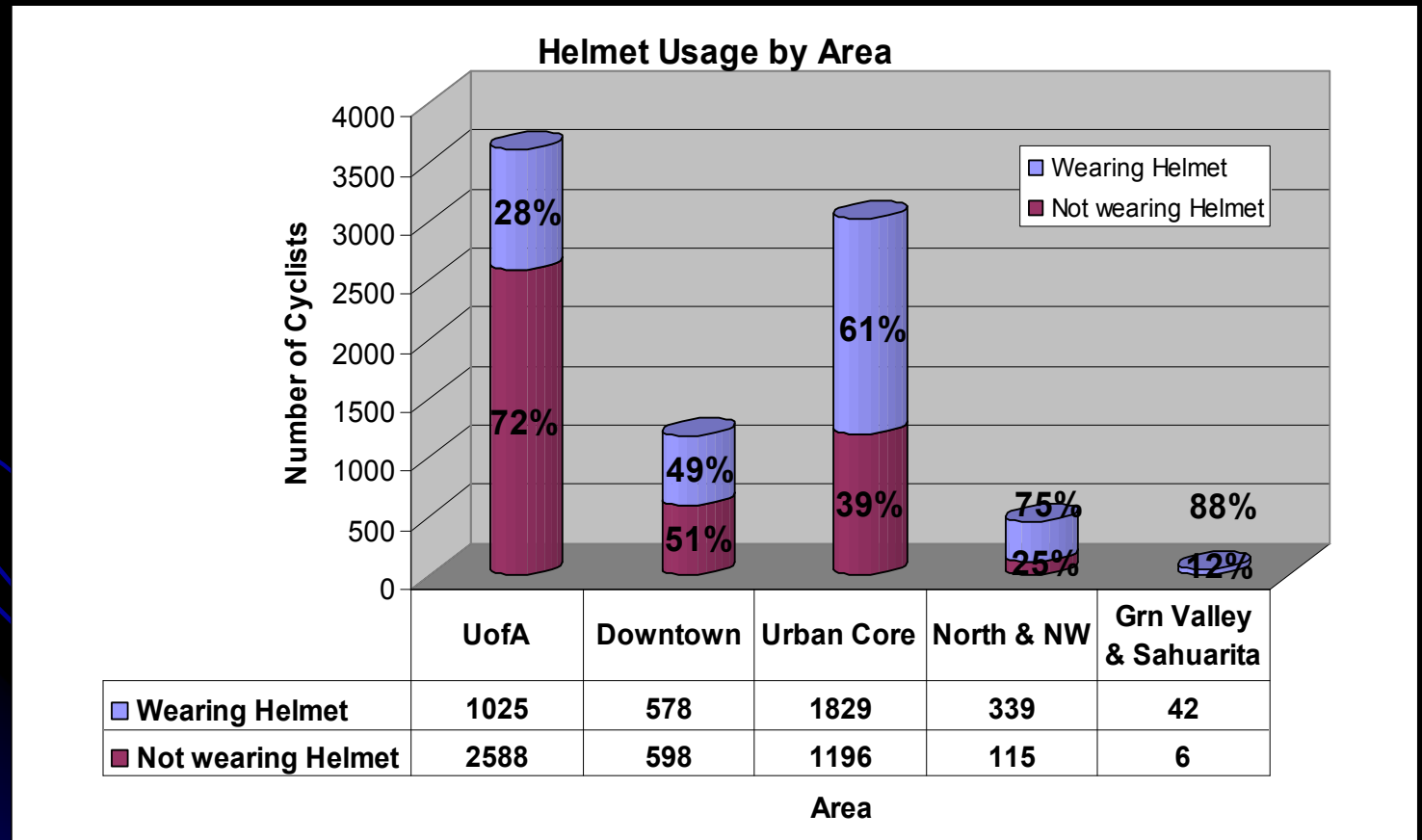
# Gender

- Females just over 25% region wide
- UofA highest with 31%, North & NW lowest with 16%

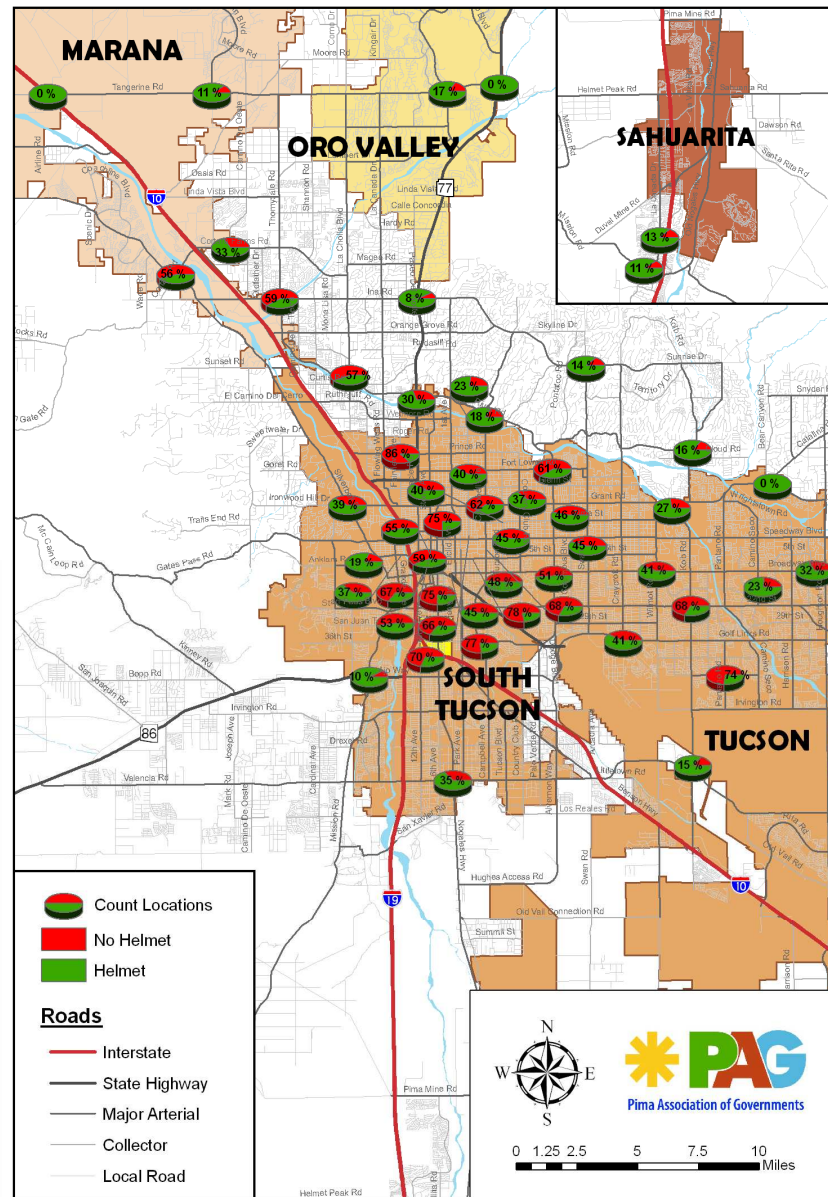


# Helmets

- 46% wore helmets region wide
- Green Valley / Sahuarita highest at 88%, UofA lowest at 28%

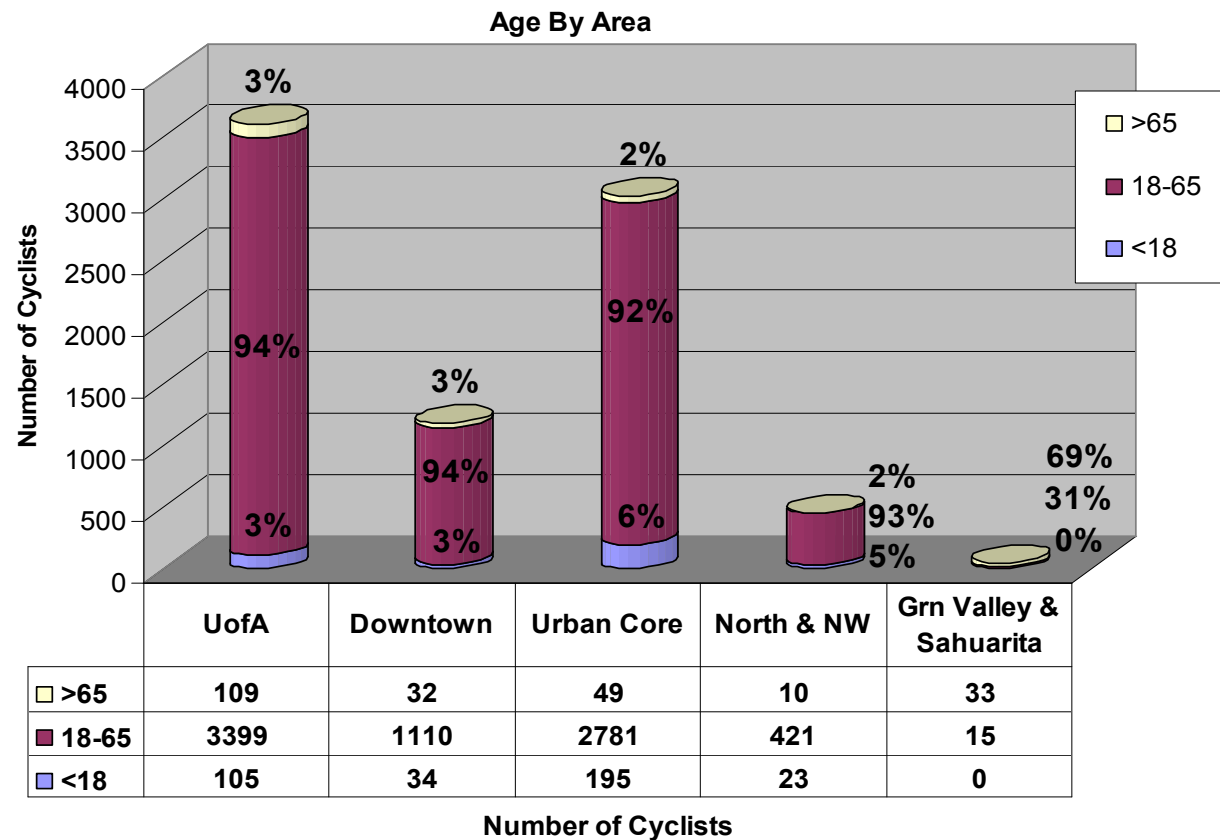


# Counts: Not Wearing Helmet, October 2008



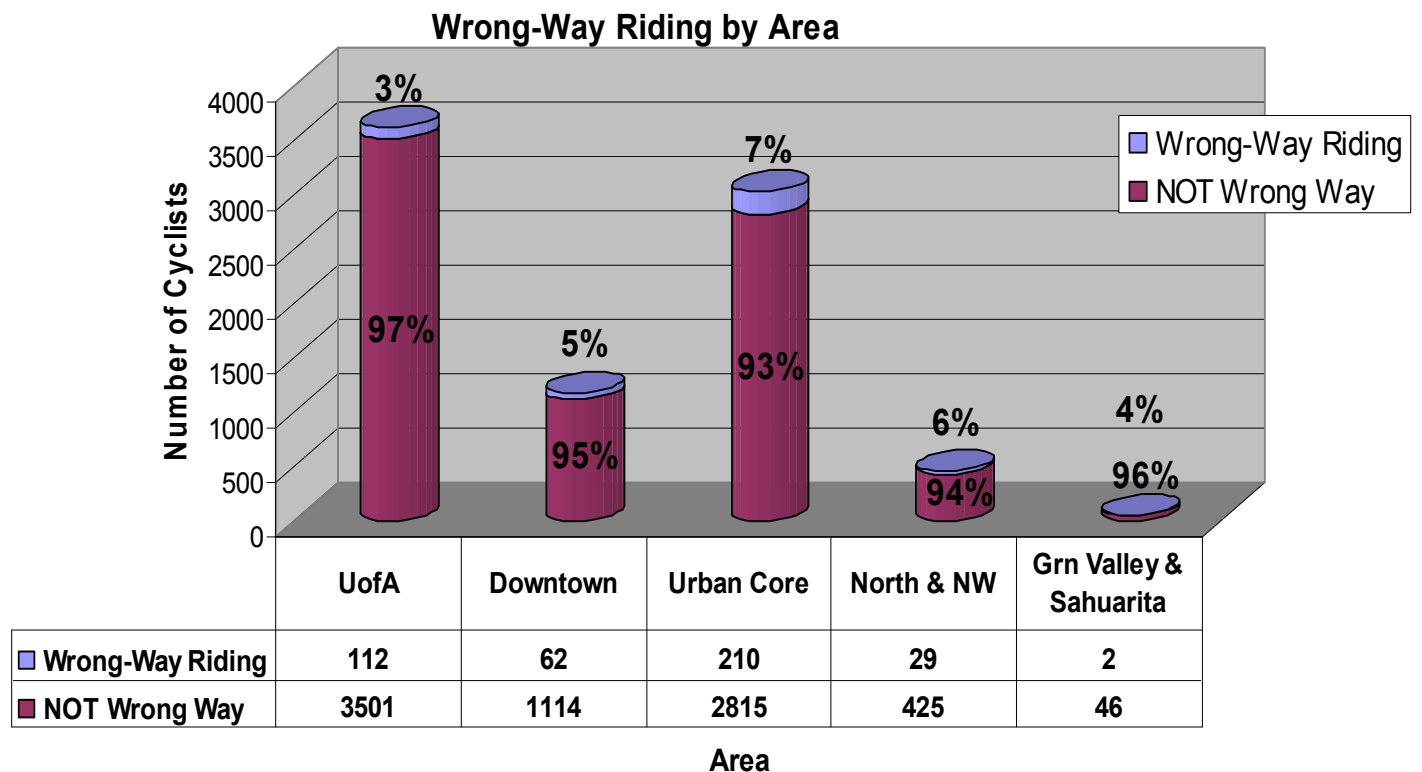
# Age

- Under 18: 4%
- 18-65: 93%
- Over 65: 3%

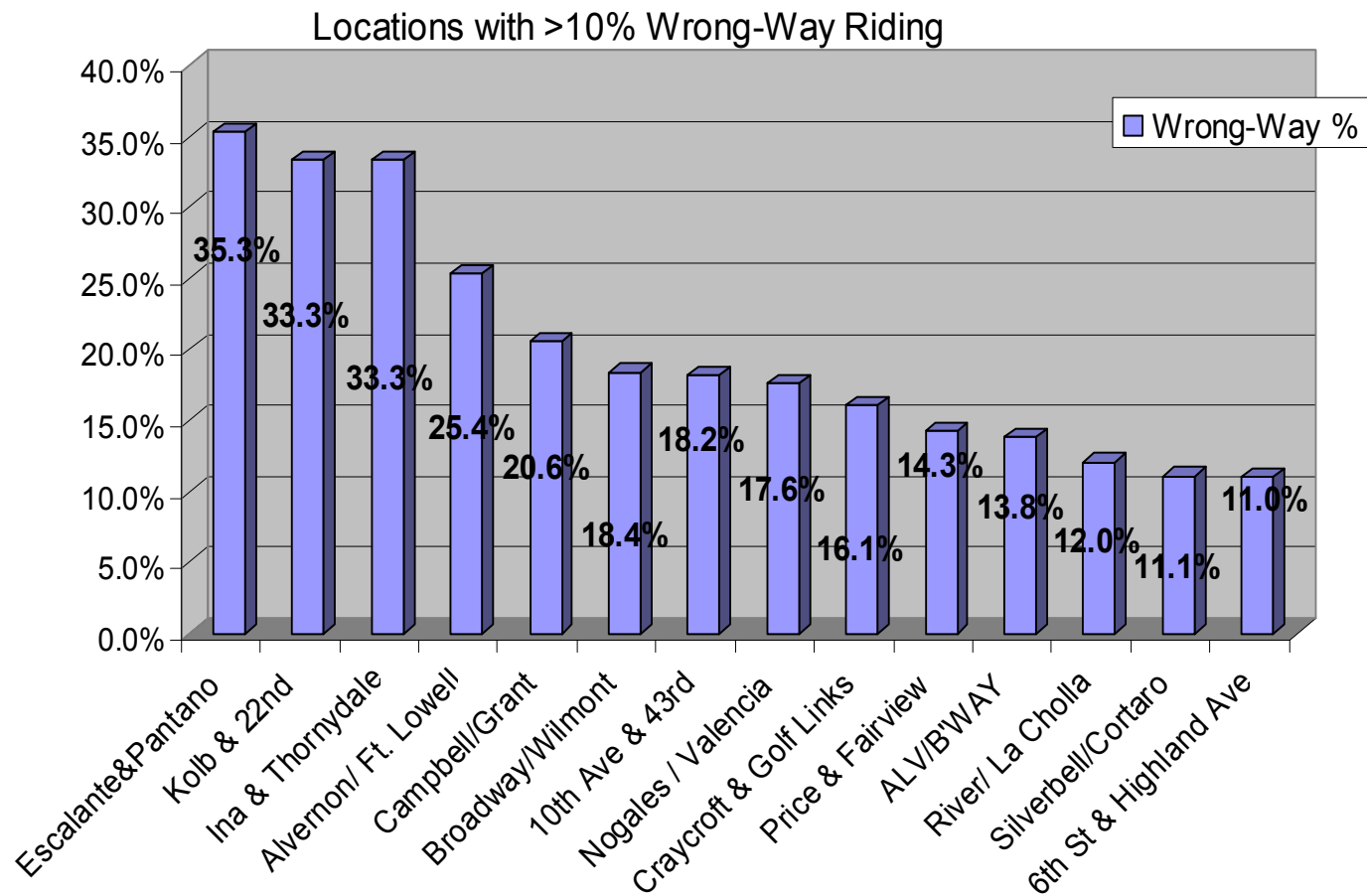


# Wrong-Way Riding

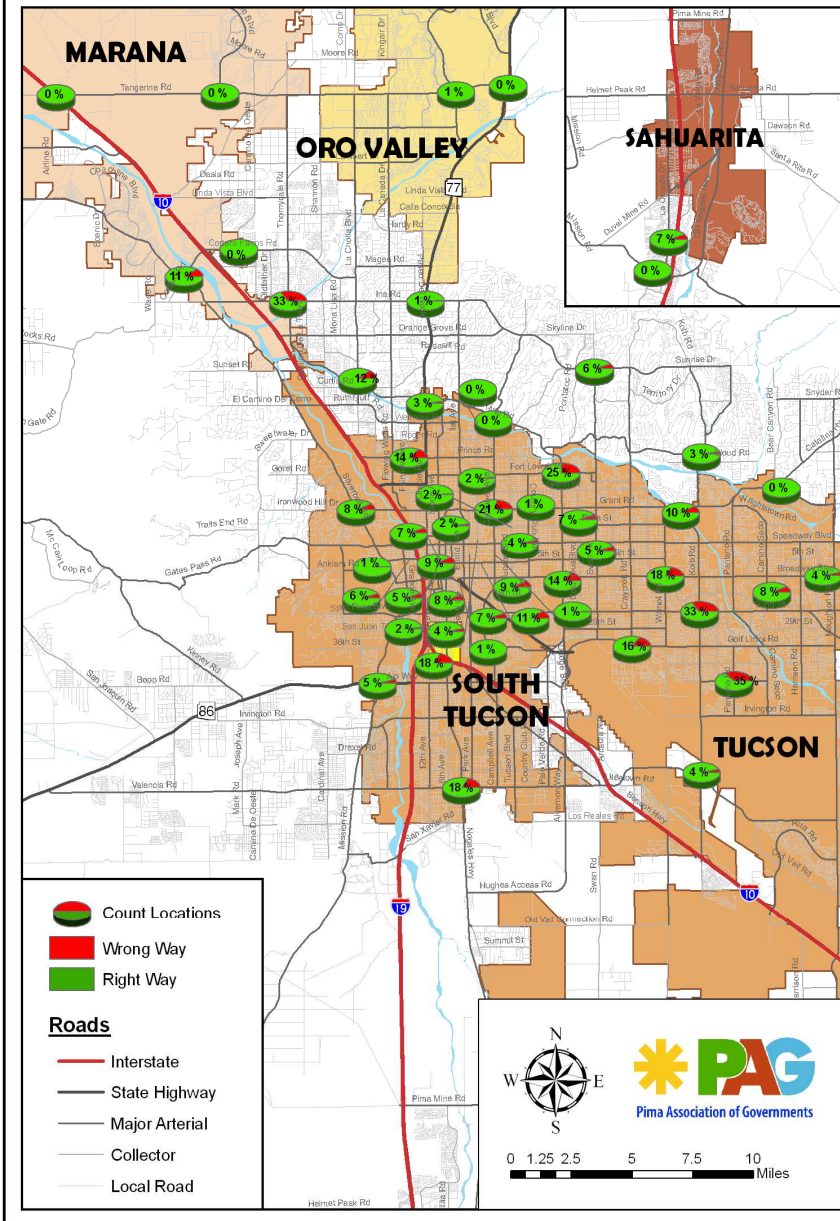
- 5% wrong-way riding region wide
- Urban Core highest at 7%
- UofA lowest at 3%



# Wrong-Way Riding More Than 10%

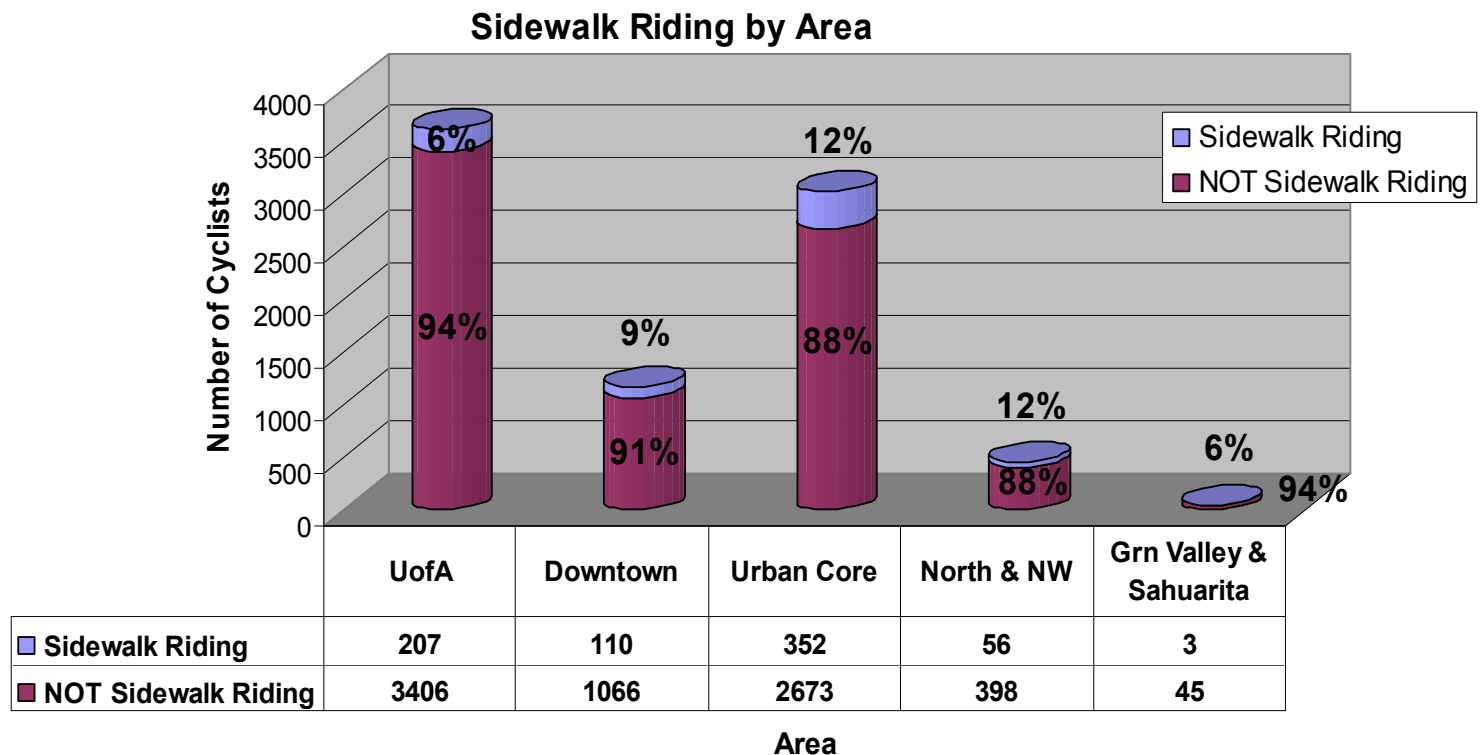


# Counts: Wrong Way Riding, October 2008

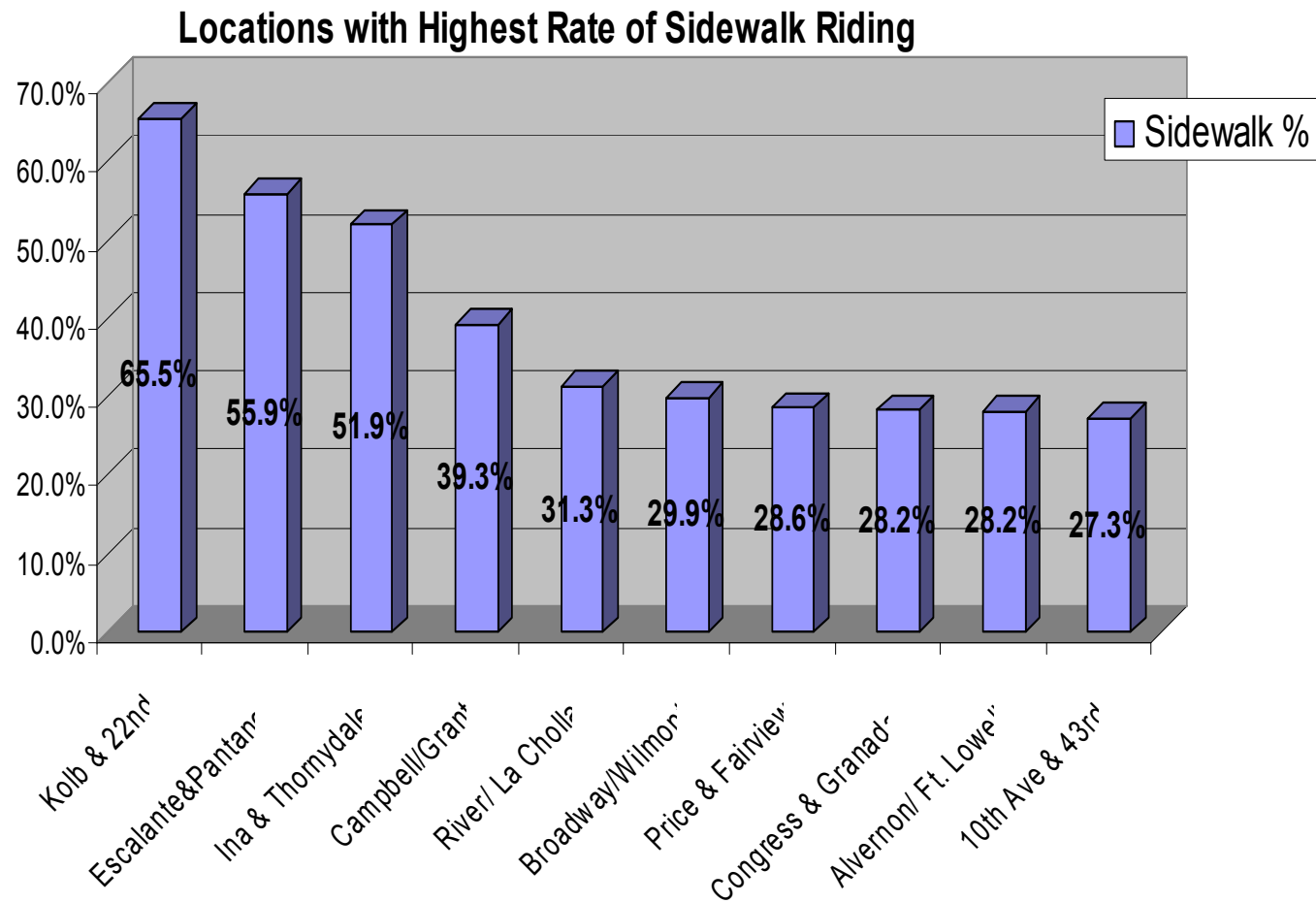


# Sidewalk Riding

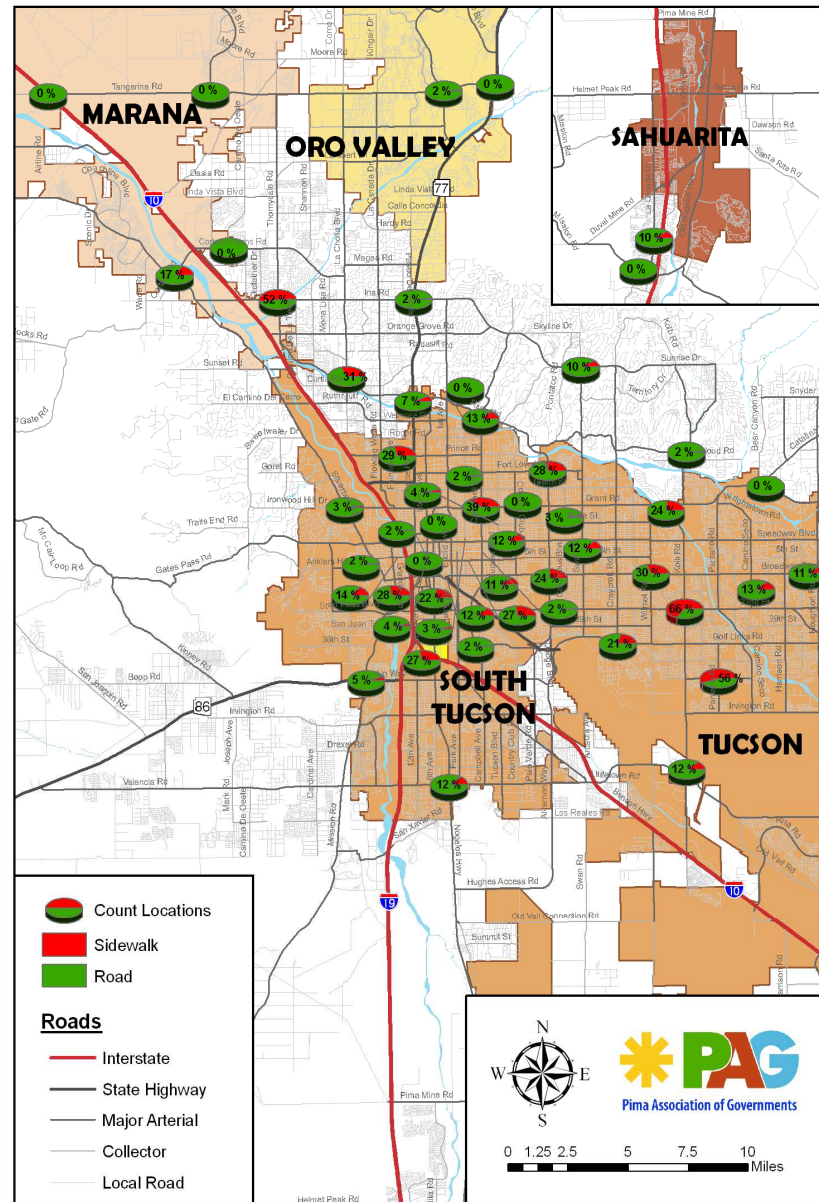
- 9% sidewalk riding region wide
- Urban Core & North/NW highest with 12%
- UofA & Grn Valley/Sahuarita lowest at 6%



# Top 10 Sidewalk Riding Locations



# Counts: Riding on Sidewalk, October 2008



# Conclusions

- Very high levels of ridership in / around the UofA (and to a lesser extent Downtown and Urban Core)
- Men outnumbered women 3-to-1
- 46% helmet usage—appears to be low when compared to other bicycle friendly communities

## Conclusions, cont.

- Vast majority of cyclists are between 18 and 65, with the exception of Green Valley & Sahuarita
- Wrong-way riding at 5%--Good or bad?
  - Rate unchanged when UofA area compared to 2000 UofA count
- Sidewalk riding at 9%--Good or bad?
  - Rate slightly lower when UofA area compared to 2000 UofA count (8% in 2000 vs. 5.7% in 2008)

# Questions?

